forming an opening in the sacrificial dielectric layer, wherein at least a portion of the opening is above at least a portion of the contact;

forming a copper layer above the second sacrificial dielectric layer and in the opening;

forming the copper interconnect by removing portions of the copper layer above the second sacrificial dielectric layer, leaving the copper interconnect in the opening;

removing the first and second sacrificial dielectric layers; and

forming a low dielectric constant dielectric layer above the structure and adjacent the copper interconnect and the contact.

5. (Amended) The method of claim 1, wherein forming the low dielectric constant dielectric layer includes forming the low dielectric constant dielectric layer using one of chemical vapor deposition (CVD), low-pressure CVD (LPCVD), plasma-enhanced CVD (PECVD), sputtering, physical vapor deposition (PVD), and spin-on glass.

6. (Amended) The method of claim 1, wherein forming the second sacrificial dielectric layer includes forming the second sacrificial dielectric layer out of one of an oxide, an oxynitride, silicon dioxide, a nitrogen-bearing oxide, a nitrogen-doped oxide, silicon oxynitride, a high dielectric constant (high K), where K is at least about 8, titanium oxide, tantalum oxide, barium strontium titanate, and forming the second sacrificial dielectric layer using one of chemical vapor deposition (CVD), low-pressure CVD (LPCVD), plasma-enhanced CVD (PECVD), sputtering, physical vapor deposition (PVD), and thermal growing.

7. (Amended) The method of claim 1, wherein forming the opening in the second sacrificial dielectric layer includes forming the opening in the second sacrificial dielectric layer using at least one of a mask of photoresist and an etch stop layer, the at least one of the mask of photoresist and the etch stop layer being formed and patterned above the sacrificial dielectric layer.

10. (Amended) The method of claim 9, wherein using the electrochemical deposition of the copper includes forming at least one barrier layer and a copper seed layer in the opening before the electrochemical deposition of the copper, and planarizing the copper using chemical mechanical polishing after the electrochemical deposition of the copper.

11. (Amended) A method of forming a copper interconnect, the method comprising:

forming a first sacrificial dielectric layer above a structure layer and adjacent a contact;

forming a second sacrificial dielectric layer above the first sacrificial dielectric layer and the contact;

forming an opening in the second sacrificial dielectric layer, wherein at least a portion of the opening is above at least a portion of the contact;

forming at least one barrier metal layer and a copper seed layer above the second sacrificial dielectric layer and in the opening;

electrochemically depositing copper above the copper seed layer above the at least one barrier metal layer;

forming the copper interconnect by removing the copper and the at least one barrier metal layer and the copper seed layer above the second sacrificial dielectric layer, leaving the copper interconnect in the opening;

removing the first and second sacrificial dielectric layers; and

forming a low dielectric constant dielectric layer above the structure and adjacent the copper interconnect and the contact.

15. (Amended) The method of claim 11, wherein forming the low dielectric constant dielectric layer includes forming the low dielectric constant dielectric layer using one of chemical vapor deposition (CVD), low-pressure CVD (LPCVD), plasma-enhanced CVD (PECVD), sputtering, physical vapor deposition (PVD), and spin-on glass.

16. (Amended) The method of claim 11, wherein forming the second sacrificial dielectric layer includes forming the second sacrificial dielectric layer out of one of an oxide, an oxynitride, silicon dioxide, a nitrogen-bearing oxide, a nitrogen-doped oxide, silicon oxynitride, a high dielectric constant (high K), where K is at least about 8, titanium oxide, tantalum oxide, barium strontium titanate, and forming the second sacrificial dielectric layer using one of chemical vapor deposition (CVD), low-pressure CVD (LPCVD), plasma-enhanced CVD (PECVD), sputtering, physical vapor deposition (PVD), and thermal growing.

17. (Amended) The method of claim 11, wherein forming the opening in the second sacrificial dielectric layer includes forming the opening in the second sacrificial dielectric layer using at least one of a mask of photoresist and an etch stop layer, the at least one of the mask of

photoresist and the etch stop layer being formed and patterned above the second sacrificial dielectric layer.

Please add new claims 41 and 42 as follows:

41. (New) The method of claim 1, wherein forming the first sacrificial dielectric layer adjacent the contact comprises forming the first sacrificial layer adjacent an intermetal via connect.

42. (New) The method of claim 11, wherein forming the first sacrificial dielectric layer adjacent the contact comprises forming the first sacrificial layer adjacent an intermetal via connect.

REMARKS

Claims 21-40 were withdrawn in a Preliminary Amendment mailed on October 29, 2001. Claims 1, 5-7, 10-11, and 15-17 have been amended. New claims 41-42 have been added. No new matter has been added. Thus, claims 1-20 and 41-42 remain pending in the present application. Applicant respectfully requests consideration of claims 1-20 and 41-42.

It is believed that a fee in the amount of $36.00 is due. The Assistant Commissioner is authorized to deduct said fees under 37 C.F.R. §§ 1.16 to 1.21 from Advanced Micro Devices, Inc. Deposit Account No. 01-0365/TT3586C. Should any additional fees under 37 C.F.R. §§ 1.16 to 1.21 be required for any reason, the Assistant Commissioner is authorized to deduct said fees from Advanced Micro Devices, Inc. Deposit Account No. 01-0365/TT3586C.